US 29 South Corridor Advisory Committee Meeting #2

# Montgomery County RAPID TRANSIT

BRT CORRIDOR STUDIES

Silver Spring Civic Center Silver Spring, Maryland March 31, 2015











# CAC Meeting #2 Agenda

#### Topics to be discussed:

- Review Member Feedback
- Project Development Process
- Existing Conditions Review
- Corridor Planning Study
- Interactive Exercise









#### **CAC** Member Feedback

Participation Goals	Topics	Strengths	Opportunities	Questions/Concerns	
To better understand BRT elements and applications	Access to BRT elements	Extensive existing transit service			
Learn about this project	Stations	Access to Silver Spring	Improve access to transit	BRT on US 29 as a Pilot Program?	
Enhance transit services	Dedicated lanes	Transportation system provides flexibility	Additional transit service	How is input from members used?	
Protect what matters to me and community	Traffic volumes and transit ridership	Some pedestrian connectivity	Enhance communities	How will BRT address pollution?	
Learn about planning & design process	Impacts to properties	Opportunities for development	Economic growth	Avoid historic properties/elements	
Address existing congestion	Project Schedule	Reversible lane system for peak direction flow	Improved access to Silver Spring	How would BRT work with mixed traffic?	
Provide a voice for others	Other BRT Projects	Access to jobs and shopping	Reduction in pollution	Plan to keep traffic off local roads	
To help implement a BRT System	Safety	Diverse neighborhoods	Reducing motor vehicle congestion	Why BRT? Why not Light Rai?	









# CAC Meeting #2 Agenda

#### Topics to be discussed:

- Review Member Feedback
- Project Development Process:
  - Local Planning Process
  - Countywide Transit Corridors Functional Master Plan
  - This Corridor Planning Study
  - Steps to Getting a Project Developed
  - Project Schedule and Milestones
  - CAC Meeting Topics
- Existing Conditions Review
- Corridor Planning Study
- Interactive Exercise







### Local Planning Process

#### **Transportation**

- Maryland's 23 counties and the City of Baltimore each develop transportation planning documents
- State law requires that localities develop a comprehensive or master plan which contain a transportation component that will:
  - Propose an appropriate configuration and location for the components of the transportation system
  - Include bicycle/pedestrian access to the system
  - Estimate the probable utilization of any proposed addition to the system
- Functional Master Plan: Build upon the recommendations of the local master plans to address issues and policies that span more than one geographic area, such as coordinating transportation networks.
- As part of the local planning process the Montgomery County Council approved the Countywide Transit Corridors Functional Master Plan in December 2013









# Countywide Transit Corridors Functional Master Plan

#### What it does:

- Recommends implementing a 102-mile bus rapid transit (BRT) network comprising 10 corridors and the Corridors Cities Transitway
- Recommendation to include dedicated lanes for bus transit along certain segments
- Recommends locations of proposed stations
- Establishes public rights-of-way to implement the BRT network

#### What it doesn't do:

- Does not endorse specific "treatments" to determine whether:
  - A dedicated lane should be in the median or on the curb
  - Right-of-way could accommodate bi-directional BRT, or if single reversible lane could achieve the same objective
  - Dedicated lanes achieved by repurposing are warranted or achievable.
- Does not recommend staging or phasing to implement the BRT corridors

This master plan is no different from other road projects recommended in master plans for which alternatives are reviewed and subject to considerable community feedback







# This Corridor Planning Study...

This Planning Study will build upon the Countywide Transit Corridors Functional Master Plan, using it as a basis for the development and evaluation of alternatives. Specifically the project intends to investigate the following in more detail:

- Ridership existing & forecasted
- Traffic existing & forecasted
- Environmental resources inventory
- Development of conceptual alternatives
  - Horizontal and vertical alignments
  - Station locations
  - Drainage and utility location needs
- Assess potential impacts and cost estimates (design, construction, right-of-way)
- Conduct a thorough and transparent public process to receive input on proposed alternatives
- Develop final report and recommendation on proposed BRT conceptual alternative for US 29







115 29











#### US 29 BRT Corridor Study Project Schedule and Milestones

,	Fall '14	Winter ' 15	Coring 115	Summar '15	Fall '15	Mintor 116	Carina 116	Summar 116
	Fall 14	winter 15	Spring '15	Summer '15	Fall 15	Winter '16	Spring 16	Summer '16
Engineering Analysis								
Data Collection								
Typical Sections								
Conc. Alts. Dvlpmt.								
Environmental Analysis								
and Documentation								
Environ. Inventory								
Purpose & Need								
Environ. Assess. Form								
Prelim. Impact Assess.								
Final Report								
Traffic & Ridership Analysis								
Existing Traffic Analysis								
Future Traffic Analysis								
Ridership								
Public Involvement								
CAC Meetings	Meets at least quarterly							
Public Workshops								







# **CAC** Meeting Topics

- CAC meetings planned to engage and interact with members on a variety of topics/issues:
  - Existing Conditions (today)
  - Purpose and Need (today)
  - Typical Sections
  - Preliminary Concepts
    - Range of alternatives
    - Station locations
  - Environmental Inventory

- Land Use & Development
- Crash Data
- Traffic Analysis
  - Existing
  - Future (No-Build/Build)
- Ridership
- Anticipated Impacts
- Costs
- Other topics/issues will be discussed during later stages:
  - Station design, architecture and area planning
  - Technology requirements
  - System Branding

- BRT vehicle
- Operation and Maintenance facilities
- Special access improvements









# CAC Meeting #2 Agenda

#### Topics to be discussed:

- Review Member Feedback
- Project Development Process
- Existing Conditions Review:
  - Roadway Features and Existing Typical Sections
  - Environmental Features
  - Transit Service
  - Pedestrian and Bicycle Facilities
- Corridor Planning Study
- Interactive Exercise









#### Roadway Features

- Corridor approximately 12-miles long
- Mix of four-to-eight lane divided and undivided sections (typically six lanes)
- There are 25 signalized intersections, 20 unsignalized, and six grade separated interchanges
- Sidewalks are intermittent, mostly present south of Stewart Lane
- Bicycle Paths and On-Road or Shared Road bicycle facilities are intermittent
- US 29 North of MD 650 is urban freeway with posted speeds 45 to 55 mph
- US 29 South of MD 650 is urban arterial with posted speeds 30 to 35 mph
- There are at least 12 unique existing typical sections









Typical Section Overview













US 29

Typical Section A
From Future Transit Center Intersection to Georgia Avenue (Looking North)











US 29
Typical Section B
From Georgia Avenue to Sligo Creek Parkway
(Looking North)

\* On Street Parking From Georgia Avenue to Spring Street Only During Non-Peak Hours











Typical Section C

From Sligo Creek Parkway to Hastings Drive
From Timberwood Avenue to New Hampshire Avenue
(Looking North)

Marylana









US 29
Typical Section D
From Hastings Drive to Timberwood Avenue

(Looking North)











Typical Section H
From 300' North of Paint Branch Creek Bridge to Blackburn Road
(Looking North)











**Lockwood Drive** 

Typical Section J
From Oak Leaf Drive to New Hampshire Avenue

(Looking North)









#### **Environmental Features**

- Streams
- 100-year floodplains
- Wetlands
- Woodlands
- Coordination with
  Fish & Wildlife Service and Department of Natural
  Resources to determine presence of rare, threatened, or
  endangered species within the study area
- Parks
- National Register Listed/Eligible Historic Sites
- Sensitive Socio-Economic Resources



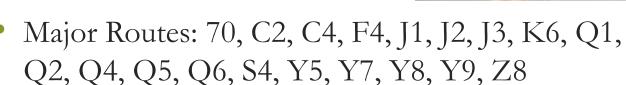






# **Existing Transit Service**

- WMATA Metrorail: Red Line
- WMATA Metrobus (31 routes)
  - Local Routes: C8, J4, L8, Z6



- Commuter Routes: J5, Z2, Z9, Z11, Z13, Z29
- MetroExtra Routes: 79, K9











# **Existing Transit Service**

- Montgomery County Ride-On (36 routes)
  - Local Routes: 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 28, 31, 33, 34, 37, 38, 39, 41, 48, 49, 51, 53
- Maryland Transit Administration (2 routes)
  - Route 201, Commuter Bus
  - Route 305, Commuter Bus



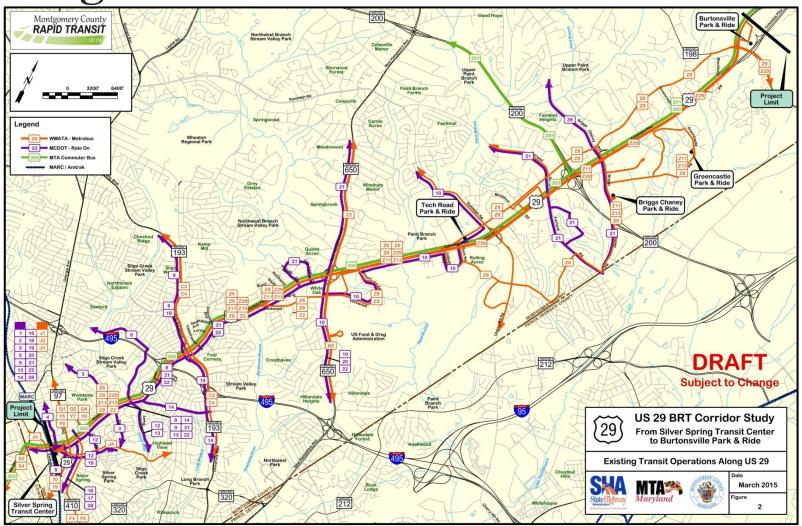








**Existing Transit Service** 











Existing Pedestrian and Bicycle Facilities









# CAC Meeting #2 Agenda

#### Topics to be discussed:

- Review Member Feedback
- Project Development Process
- Existing Conditions Review
- Corridor Planning Study:
  - Simplified Study Process
  - Purpose and Need Overview
  - Example Needs Categories
    - Mobility, System Connectivity, Transit Demand & Appeal, Livability
- Interactive Exercise

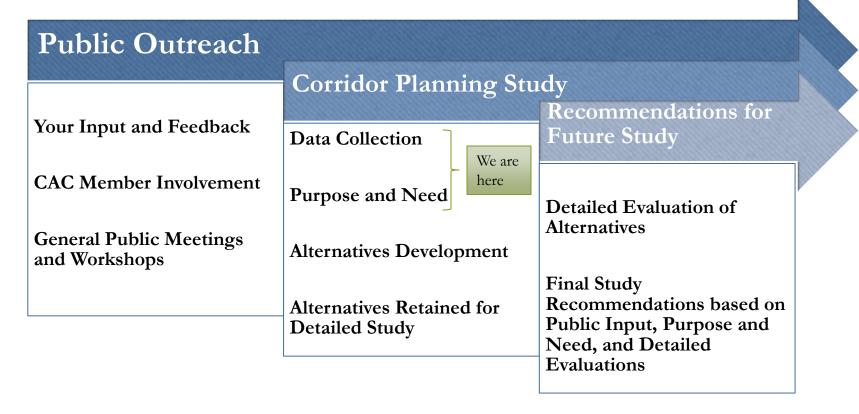








# Simplified Corridor Planning Study Process











#### Purpose and Need Overview

#### What is Purpose and Need?

- Contains a statement of what the study intends to address based on the "needs"
- Clearly demonstrates that quantifiable "needs" exist that support why the project development process should be pursued
- Establishes justification for why funding should be allocated and prioritized









#### Purpose and Need Overview

#### How is Purpose and Need Used?

- Utilizes quantifiable data to identify problem(s) that require attention and further study
- Acknowledges problems have multiple potential solutions
- Forms baseline for comparison of future evaluations
- Drives conceptual alternatives discussion
- Supports recommendation of an alternative









### Purpose and Need (Simplified)

#### **Purpose and Need = WHAT and WHY**

#### Purpose

- **WHAT** are the major objectives?
- WHY will they be addressed by this project?

#### Need

- **WHAT** are the existing or forecasted problems?
- WHY are these problems occurring?

These fundamental questions provide support for later phases:

- Conceptual alternatives analysis: options for how to address the what and why
- Recommendations: the "best" options for how to satisfy the what and why









Example Needs Categories

System Connectivity

Livability

Project Purpose

Mobility

Transit Demand









### **Mobility**

- The ability to move or be moved freely and easily
- Example: Current and forecasted levels of roadway congestion negatively effects the mobility of drivers and transit riders, leading to a less efficient transportation network.









### **System Connectivity**

- Refers to the density of multi-modal mobility options within a transportation network
- Example: A resident from Fairland drives to work in Washington, D.C. everyday. They'd prefer to bicycle to a bus stop, then transfer from bus to Metrorail. Unfortunately they can't find a safe and reliable connection they can use to efficiently travel this way.









### Transit Demand & Appeal

- Demand refers to the existing and forecasted ridership volumes associated with a transit system. Appeal refers to elements that, if implemented, may grow those numbers by attracting additional riders.
- Example: Once the transit oriented development along US 29 was complete, it drew in residents and business owners looking to capitalize on the efficient transit connections it offered.









### Livability

- "The sum of the factors that add up to a community's quality of life, including the developed and natural environments, economic growth, social stability, educational opportunity, and cultural, entertainment and recreation possibilities."
  - Porter, Christopher. "Planning for Sustainable and Livable Communities." N.p., n.d. Web.
- Coordinated land use and transit-based transportation systems could enhance livability by providing more efficient and connective mobility options for residents.







# CAC Meeting #2 Agenda

#### Topics to be discussed:

- Review Member Feedback
- Project Development Process
- Existing Conditions Review
- Corridor Planning Study
- Interactive Exercise:
  - Public Input and Feedback
  - Needs Exercise
  - Summary of Needs Discussion









### Public Input and Feedback

- Public and CAC Member input and feedback form the foundation we will build upon throughout the project development process
- Your values and concerns and those of the communities you represent will help identify the needs that will shape purpose of this study, and ultimately define the alternatives analysis and recommendations









#### Interactive Exercise

Based on the **values** and **concerns** important to you and those in your community, provide specific examples of **needs** using the categories and elements listed.

#### Mobility

 Ease of Access and Movement

# System Connectivity

• Multi-modal links

# Transit Demand & Appeal

Existing and Future Ridership

#### Livability

• Quality of Life

#### Other Needs to Consider?









### Summary of Needs Discussion

- Share a few of the common elements discussed in your groups
- The Project Team will collect all comments received. The organized comments will be sent back to the CAC Members as part of the meeting summary. If you think of additional needs, please feel free to provide them to your facilitator at anytime.
- The feedback we receive will be used to help establish the study needs and define the project purpose









### Future Meeting Schedule & Logistics



Transit Access Options: Ride-On Route 10, Metrobus Routes Z6 & Z8 Stops on Stewart Lane at April Lane

#### **Next Meeting:**

Mid-to-Late May

#### Time:

6:30 pm to 8:30 pm

#### Location:

White Oak Community Center



1700 April Lane, Silver Spring, MD 20904







# Questions







